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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/501,233 | 07/12/2004 | Michel Delaage | 3665-107 | 3546 |

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| EXAMINER | |
|---|---|
| AMARI, ALESSANDRO V | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2872 | |

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H·A

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/501,233 | DELAAGE, MICHEL | |
| | Examiner | Art Unit | |
| | Alessandro V. Amari | 2872 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *12 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *15-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-17,19 and 25-28* is/are rejected.

7)☒ Claim(s) *18 and 20-24* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 July 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/12/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement filed 12 July 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### *Claim Objections*

2. Claims 15-28 are objected to because of the following informalities:

Regarding claims 15 and 27, the phrase, "a third frame supported by the second frame by means used to maintain the third frame blocking said third frame in the plane perpendicular to the observation axis" is confusing and ambiguous. It is uncertain how the third frame can block itself. Claims 16-26 and 28 inherit the same issue.

Regarding claim 16, the phrase, "the analysis plate" has no prior mention in the preceding claim.

Regarding claim 18, the phrase, "the third plate" has no prior mention in the preceding claim. It appears the phrase should read "the third frame".

Regarding claim 19, the phrase, "the means used to hold the third frame" has no prior mention in the preceding claim. Also, the phrases, "on one hand" and "on the other hand" on lines 2 and 4 respectively, appears to render the claim

indefinite because it is uncertain whether the limitation following the phrase is part of the claimed invention.

Regarding claim 23, the phrase, "means used to immobilize the third frame" has no prior mention in the preceding claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 15-17 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over George US 3,652,146 in view of Marchlenski US 5,357,366.

In regard to claims 15 and 27, George teaches (see Figures 2, 4) a device for positioning a plate comprising one or more samples on an observation or analysis device comprising an observation or analysis lens of at least part of a sample along an observation axis from an observation face of the plate (24) as described in column 2, lines 12-14, and a chassis (10) having a support assembly, wherein this support assembly comprises a first movable frame (20) sliding in a plane perpendicular to the observation axis; a second movable frame (32) supported by the first frame sliding in said plane perpendicular to the observation axis, the first and second frames being movable in a direction perpendicular to the direction in which other frame moves as described in column 2, lines 39-45, and a third frame (30) supported by the second

frame by means used to maintain the third frame blocking said third frame in the plane perpendicular to the observation axis, while leaving third frame free to move essentially along the observation axis as shown in Figure 2 and as described in column 3, lines 31-35 and wherein the sample observation or analysis device further comprises a light source for at least part of the sample and image acquisition means as described in column 2, lines 12-14. Although the prior art does not specifically teach the claimed light source this is seen as an inherent teaching of the device since some kind of light source must be present in order for the observation or analysis device to operate as intended.

However, in regard to claims 15 and 27, George does not teach means to immobilize the plate.

In regard to claims 15 and 27, Marchlenski teaches (see Figure 10) a means (130) to immobilize the plate as described in column 6, lines 45-47.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the means to immobilize the plate as taught by George in the device of George in order to more securely position the plate in the microscope to prevent observation errors.

Regarding claim 16, George teaches means used to immobilize the third frame in the vertical position for placing the analysis plate as described in column 2, lines 60-64.

Regarding claim 17, George teaches means of controlling the vertical position of the observation face of the plate with respect to the observation lens as described in column 2, lines 46-50 and column 3, lines 31-34.

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over George US 3,652,146 in view of Marchlenski US 5,357,366 and further in view of Cutburth et al US 4,772,109.

Regarding claim 19, George in view of Marchlenski teaches the invention as set forth above but does not teach that the means used to hold the third frame comprise on the other hand at least one torsional spring located between said frames.

Regarding claim 19, Curburth et al teaches (see Figure 3) a torsional spring (54) located between said frames as shown in Figure 3.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the torsional spring of Cutburth in the device of George in view of Marchlenski in order to provide more stability for the device.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over George US 3,652,146 in view of Marchlenski US 5,357,366 and further in view of Schweizer US 5,438,451.

Regarding claim 25, George in view of Marchlenski teaches the invention as set forth above but does not teach a means of controlling the vertical position of the observation face of the plate with respect to the observation lens and wherein said means of control are comprised by a magnetic or piezoelectric lift system for the plate.

Regarding claim 25, Schweizer teaches (see Figure 1, 2) a means of controlling the vertical position of the observation face of the plate (12) with respect to the observation lens and wherein said means of control are comprised by a magnetic or piezoelectric lift system for the plate as described in column 2, lines 45-67.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the piezoelectric lift system as taught by Schweizer in the device of George in view of Marchlenski in order to achieve a high degree of linearity of the guided motion of the frames providing for better positioning of the sample for enhanced observation.

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over George US 3,652,146 in view of Marchlenski US 5,357,366 and further in view of Lo et al US 6,252,705.

Regarding claim 26, George in view of Marchlenski teaches the invention as set forth above but does not teach that the motions of the first and second frames are motorized.

Regarding claim 26, Lo et al teaches (see Figures 1a, 1b) that the motions of the first and second frames are motorized as described in column 2, lines 11-22.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to motorize the motions of the first and second frames as taught by Lo et al for the device of George in view of Marchlenski in order to achieve more precise control of the frames providing for better positioning of the sample for enhanced observation.

8. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over George US 3,652,146 in view of Marchlenski US 5,357,366.

Regarding claim 28, George in view of Marchlenski teaches the invention as set forth above but does not teach that the light source is a lamp, laser or an array of

electroluminescent diodes. It is notoriously old and well known in the microscope art to utilize a lamp, laser or an array of electroluminescent diodes as a light source. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a lamp, laser or an array of electroluminescent diodes as a light source in order to provide optimal illumination in order for enhanced observation.

***Allowable Subject Matter***

9. Claims 18 and 20-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claim 18 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "one thin spring plate forming a pivot, preferably located in the observation plane, said spring plate being connected respectively to the second and third frame" as set forth in the claimed combination.

Claim 20-22 are allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "supporting shoes arranged around the inner periphery of the third frame and a cam mounted on the third frame" as set forth in the claimed combination.

Claim 23 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "two opposing limit stops each mounted on one side of the first frame extending parallel to the motion direction of the second frame and by tow opposing ties each fixed perpendicular to one side of the third frame" as set forth in the claimed combination.

Claim 24 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "a strut fixed with respect to the observation lens and having a bearing area of the observation face of the plate" as set forth in the claimed combination.

The prior art of record teaches a device for positioning a plate comprising a support assembly comprising a first movable frame, a second moveable frame supported by the first frame sliding in said plane perpendicular to the observation axis, the first and second frames being movable in a direction perpendicular to the direction in which other frame moves and a third frame supported by the second frame wherein the third frame moves along the observation axis and presents means to immobilize the plate. However, the prior art of record does not teach one thin spring plate forming a pivot, preferably located in the observation plane, said spring plate being connected respectively to the second and third frame or supporting shoes arranged around the inner periphery of the third frame and a cam mounted on the third frame or two opposing limit stops each mounted on one side of the first frame extending parallel to the motion direction of the second frame and by tow opposing ties each fixed perpendicular to one side of the third frame or a strut fixed with respect to the observation lens and having a bearing area of the observation face of the plate and there is no motivation or teaching to modify this difference as derived.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (571)

272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ava
16 August 2005

Alessandro Amari
Alessandro Amari
Examiner AU 2872